

Table S1. Mapping Statistics for FMRP CLIP Tags

Sample	Total	Unambiguous mapping	Unique reads
FMRP P14 mono protocol 1	166,277	154,954	7,439
FMRP P14 poly protocol 1	124,735	113,209	10,924
FMRP P15 mono protocol 1	47,313	42,336	10,919
FMRP P25 mono protocol 1	116,456	98,606	12,153
FMRP P25 poly protocol 1	210,304	185,081	10,698
FMRP P11 poly protocol 2	18,458,033	11,950,288	43,593
FMRP P13 poly protocol 2	14,386,831	10,416,493	68,178
Total FMRP unique tags:			163,904
Hu P11 pt sera prot. 2	18,168,783	11,518,147	59,118
Hu P13 pt sera prot. 2	18,889,613	14,884,884	98,832
Total Hu unique tags:			157,950

Five independent experiments, using two different protocols to IP FMRP, and three different sets of mice were sequenced using the 454 Life Sciences platform, using Protocol 1 as described in the main text and Extended Experimental Procedures. In addition, two independent FMRP CLIP experiments and two parallel Hu CLIP experiments from the same lysates were performed using CLIP Protocol 2. Experiments are named by age of the mice used (P11-P25) and whether mixed monoclonal antibodies against FMRP (7G1-1 and 2F5), polyclonal antibody against FMRP (ab17722), or patient antisera against Hu was used for the IP. The CLIP protocol used (1 versus 2) is also noted in the sample name. The number of total reads is indicated (total), as is the number of unambiguously mapped tags to the mm9 build of the mouse genome using BLAT as described in Extended Experimental Procedures (unambiguous mapping). Unique reads refers to the number of unique sequences obtained after collapse of duplicates to a single read, as described.